ONLINE SOCIAL NETWORKS:
SHAPING DECEPTION IN ONLINE RESUMES

A Thesis

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ABSTRACT

This study explores the way that social networking websites (SNS) shape individuals' patterns of deception in online resumes. We argue that because specific features of SNS, such as the ability for individuals in the social network to view profile information, connect the virtual and actual self (Walther & Parks, 2002) the costliness of deception increases (Donath, 1999). We tested this prediction in the context of online resumes constructed on the SNS Linkedin.com®. Participants (N = 123) in a between-subjects experiment created profiles in four self-presentational settings: a traditional (offline) resume, a private SNS profile, a public SNS profile, a private SNS profile with specific social network information and a public SNS profile with specific social network information. Findings suggest that frequency of deceptive acts did not differ between offline, private and public SNS profile conditions, although these conditions affected types of deception that people use in resumes. Individuals tended to lie more about interests in public SNS resumes than in private SNS and traditional resumes. The results are discussed in terms of warranting (Walther & Parks, 2002) and the costliness of deception (Donath, 1999).

BIOGRAPHICAL SKETCH

Jamie Guillory is a Master's student at Cornell University studying Communication Research and plans to graduate in May 2009. She graduated from the Pennsylvania State University in May 2007 with Bachelor of Arts degrees in Psychology and Pubic Relations. Her current research interests focus on how new forms of technology affect perceptions and behavior. In particular, Jamie studies the way that deception and perceptions of trustworthiness and competence are affected by the structure of social networking Websites. She recently finished applying to PhD programs in Communication Research and plans to continue to work in academia in the future.

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LIST OF ABBREVIATIONS

SNS: Social Networking Website

FtF: Face-to-face

CMC: Computer-mediated Communication

AFI: Anticipated Future Interaction

LIST OF SYMBOLS

®: Registered trademark

INTRODUCTION

Deception is arguably one of the most important communicative phenomena of contemporary society (Miller & Stiff, 1993). It is common in everyday interaction, with some studies suggesting that an individual tells, on average, one to two lies daily (DePaulo, Kashy, Kirkendol, Wyer & Epstein, 1996; Hancock, Thom-Santelli & Ritchie, 2004). Though many interpersonal lies may be benign (i.e., attempts to avoid hurting a loved one's feelings: "No, darling you do *not* look fat in that dress!"), deception has the potential to affect organizational and political arenas on a national and even international level (i.e., corporate and political scandals). For example, the Brookings Institution estimates that the deceptions involved in the WorldCom and Enron scandals will cost the U.S. economy somewhere between $37 and $42 billion of gross domestic product in just the first year (Graham, Litan & Sukhtankar, 2002). On a more localized scale, deception in organizations has the potential to affect turnover rates when unqualified candidates are hired. In one study of 40 hotel employees with an hourly wage of $12.00 and a turnover rate of 50 percent, the cost of turnover for the hotel employees was more than $150,000 yearly (Hinkin & Tracey, 2000).

LITERATURE REVIEW

Clearly deception, which we define as a message conveyed by an interlocutor with the intent of creating a false belief in the partner (Hopper & Bell, 1984; Kraut, 1980; Miller, Mongeau, & Sleight, 1986), can have injurious consequences. But what motivates people to deceive? Recently, DePaulo et al. (1996) have argued that self-presentational goals are perhaps the most important factor in promoting and constraining deception. Self-presentation refers to the process of molding behavior to encourage specific impression formation and takes into account both an individual's audience and the context of an interaction (Goffman, 1959). All communication, both deceptive and truthful, involves this process of self-presentation (DePaulo, Lindsay, Malone,

Muhlenbruck, Charlton, & Cooper, 2003). This process incorporates decisions regarding whether or not to share specific information about oneself and whether or not to lie (Schlenker, 2002; Schlenker & Pontari, 2000).

A classic case of self-presentation that may involve deception is the personal resume. Constructing a resume is an important self-presentational activity, one in which appearing competent and valuable is paramount. Clearly, self-promotion is a major self-presentational goal in creating a resume, which may provide sufficient motivation to use deception (Feldman, Forrest, & Happ, 2002). Indeed, according to George (2004), 90 percent of individuals admitted to lying at least once on a resume-like scholarship application. Although authors asked participants in the study to make their applications as competitive as possible, they were not prompted to be deceptive. The effects of self-presentational goals on deception were examined even more directly in a study by Feldman et al. (2002), in which researchers presented individuals in a dyad with the self-presentational goal of either appearing competent or likeable in a short conversation with a partner. Those presented with either of the self-presentational goals lied to their partners significantly more than dyads in a control condition who were simply asked to have a 10-minute conversation.

If self-presentational goals drive deception, how do new forms of self-presentation brought about by modern communication and information technology, such as online social networking sites (SNS) (i.e., Facebook®, MySpace®, LinkedIn®, etc.), affect the relationship between self-presentation and deception? SNS capture and make visible digital traces in a user's social network. SNS not only allow individuals to maintain relationships with current members of social networks, but also allow them to connect with new people based on common interests, goals, etc. Boyd and Ellison (2007) define SNS based on the following three criteria: 1) enable users to create a publicly available, or at least partially publicly available, profile, 2) provide a list of other individuals who share ties with the user, and 3) enable users to view and explore their list

of ties and others' similar lists of ties within the SNS. The information shared on profiles may vary from site to site, but all social networking websites generally share these three characteristics in some capacity.

The present study examines how exposure to and interaction with SNS affect the way that deception is used to construct self-presentations. In particular, the study examines whether the properties of SNS resume profiles, such as publicness, change the frequency or type of deception in resumes. We first review the literature concerned with how communication technology in general can affect deception before considering the specific factors that may play a role in the context of creating SNS profiles. Figure 1 provides an overview of concepts, specific constructs and their operationalizations.

Main Concepts	*Specific Constructs*	*Operationalization*
Self-presentational Goals	Appearing competent and attractive to employers	Attractive job description; $100 gift card for "best-fitting" resume
Warrant	Social network information Publicness of presentation	Specific names of social network connections Offline, private or publicly available Linkedin® profile
Deception	Message used to intentionally create false belief	Frequency of deception Everyday types of deception Resume-related types of deception

Figure 1. Overview of main concepts, specific constructs and operationalizations.

Digital Deception

Online environments offer an abundance of novel opportunities for deception. Popular opinion holds that the online environment is rife with deception, with one study finding that 73 percent of individuals believe deception to be widespread online (Caspi & Gorsky, 2006) and a second study indicating that eight out of ten online daters have serious concerns about deception (Gibbs, Ellison & Heino, 2006). Hancock (2007) added the feature of technology to the original definition of deception (Hopper & Bell, 1984; Kraut, 1980; Miller et al., 1986) can to address concerns regarding *digital deception*, or the deliberate control of communication in a technologically mediated message that aims to create false belief in the message receiver.

Hancock (2007) further separates digital deception into identity-based deception, which is deception based on the interlocutor's personal identity (i.e., lying about one's physical appearance, abilities or skills), and message-based deception, which is deception that takes place in the specific communication between interlocutors (i.e., lying about one's weekend plans). In the context of self-presentations in SNS profiles, identity-based deception is the most relevant form of deception because individuals deceive about information relevant to their personal qualities.

Previous research demonstrates that identity-based deception occurs more frequently in computer-mediated communication (CMC) environments than in face-to-face (FtF) environments (Cornwell & Lundgren, 2001). Although individuals can convey a whole host of deceptions from altering style of clothing to adopting an affected accent in FtF communication, they still must interact physically with significant others on a daily basis who can easily recognize identity deceptions (i.e., deceptions about physical characteristics). Hancock (2007) argues that the major reason that digital deception is expected to occur more frequently is that online communication is typically "text-based interaction or virtual representations of self" (p. 291). People appear to believe that the virtual environment provides users with the opportunity to distance the actual self

(identity in the real world) from the virtual self (identity online) more easily. This is because fewer possible consequences exist (i.e., personal shame, or ridicule from significant others) than could occur in the FtF world where fellow interlocutors can more easily identify deception (Donath, 1999).

Personal information on SNS, such as a profile or resume placed on LinkedIn®, is a good example of a text-based presentation of self. SNS resume profiles give the job seeker the opportunity to represent past experiences, skills and achievements with as much or as little accuracy as they wish. What factors of SNS shape the way that deception occurs in a SNS resume profile? Is deception more likely in a resume posted on a SNS, given the general belief that online communication allows the individual to distance the actual self from the virtual self and thus tends be more deceptive than their FtF counterparts? Or might the qualities of SNS inhibit the use of deception in self-presentations?

One important aspect of SNS environments that might constrain deception in self-presentations is the presence of network information, namely who is related to whom. Social network information helps to more closely tie an individual's actual identity with their virtual identity and thus presumably represents a factor that may shape the practice of deception (Toma, Hancock & Ellison, 2008).

Social network information can be operationalized in the form of a *warrant*, a concept introduced by Walther and Parks (2002) and defined as the distance between the physical and online self. Warranting specifically relates to others' interpretation of information about a person. A warrantless environment is one with no connection between the physical self and the online presentation. A good example of a warrantless environment would be an online chat room, in which individuals may share as much, or as little, true information about their real-world identity as they wish with fellow interlocutors. Walther, Van Der Heide, Kim, Westerman & Tong (2008) argue that the warranting value of information shared online is directly related to how impervious

information shared online is to manipulation by the individual that the information describes. Though online settings provide the possibility of a 'warrantless' environment, recent advances online provide an important warrant: your social network (Walther & Parks, 2002).

Walther et al. (2008) argue that information gained from members of the individual's social network is of particularly high value in terms of warranting. This is because social networks 1) provide an opportunity to verify information about a communication partner with members of the network and 2) provide an audience to which the communication partner must provide explanation for deceptions (Walther & Parks, 2002).

A similar argument is made by Donath (1999), who posits that when there is disconnect between the actual and virtual self, the cost of producing deception is substantially reduced. On the other hand, when there is a close relationship between the virtual and actual self, as there is with a personally identifying document such as a resume, the costs of producing deception should increase. Donath (2007) notes that what keep information reliable, or keeps people from being deceptive, are the costs associated with producing that behavior. Previous research (Toma et al., 2008) suggests that people generally view deception negatively and as socially unacceptable. Thus it follows that having members of one's social network view deceptive information would be a negative outcome that most individuals would want to avoid. The public and socially connected displays of personal information inherent to SNS should therefore act as a factor in shaping patterns of deception.

Recent research in the context of online dating (Toma et al., 2008) demonstrates the constraining effects that social networks can have on the practice of deception. In Toma et al.'s (2008) study, members of online dating websites were asked to indicate areas where they lied on their online dating profile. The more friends who knew about the participants' profile the more accurate they reported their profile photograph to be,

suggesting that people in the participant's social network shaped their practice of deception.

Building on these findings, Walther et al. (2008) explored the formation of perceptions of individuals based on information from members in their social network. Their study explored the effects of self and other-generated information from Facebook® profiles on judgments of individuals. Several of the findings in their study indicate the importance of social network information in forming perceptions of the individual. They found that positive statements made in wall postings by friends improved judgments of the profile owner's social and task attractiveness as well as their credibility. Their findings also indicated that other individuals' judgments were more important in forming perceptions of the individual, than self-generated information. Though these findings relate to perceptions of deception, Walther et al. (2008) argue that the presence of a warrant, the social network in this case, decreases the manipulability of information and thus should shape patterns of deception.

A similar effect should take place in the practice of deception in SNS given that these sites are designed to make a person's profile public to their social network. This publicness, or perception that personal information is available to others (known or unknown) online, should shape patterns of deception by creating a warrant between the actual and virtual self. According to Walther and Parks (2002), this publicness should decrease the frequency of deception due to the costs that may be associated with network members' perception of deception. For example, if a former employer in the individual's social network discovers that a former employee lied about past experience on a current resume, these consequences might include damage to the employee's reputation or notification of the individual's current employer. Clearly, the availability of an individual's resume to their social network should shape patterns of deception for job seekers hoping to project an accurate depiction of their skills, achievements and past experiences.

The Present Study

The present study examined deception in the specific context of SNS profiles produced in LinkedIn®, a professional networking website created for individuals who are seeking jobs. Like other social networking websites (i.e., Facebook®, see Walther et al., 2008 for review), LinkedIn® provides users with a formatted web page that includes categories similar to those that would be seen on a typical resume or curriculum vitae. Users can share general information (i.e., current position and location), as well as information related to work experience and education. Other categories in the profile allow users to share skills or specialties, personal websites, interests, honors and awards received. Unlike self-presentations in traditional resumes, users of LinkedIn® can make their profile public and create links or connections with people they've worked with, met professionally, went to school with, formed friendships with, etc. The present study explores two sets of hypotheses, which 1) address the importance of social network information in shaping deception and, 2) address the importance of presentation condition, or publicness, in shaping deception.

Social Network Information

The first set of hypotheses relates to whether or not the presence of specific social network information, or social network connections with known others, on SNS affects the practice of deception, regardless of the presentation condition, or publicness of the profile. These hypotheses explore not only whether the presence of social network information (i.e., publicness of one's profile to members of the social network) affects the frequency with which individuals engage in acts of deception, but also how this information shapes the types of deception that individuals use.

The first hypothesis is concerned with how the social network connections in SNS sites affect the *frequency* of deception in self-presentation. Walther and Parks (2002) suggest that social networking websites may shape deception by providing the opportunity to verify information about a communication partner with members of the

network, which ties the virtual self more closely with the actual self. When there is a close relationship between the virtual and actual self, as there is with a personally identifying document such as a resume, the costs of deceptive behavior should increase (Donath, 1999). Based on these theoretical assumptions and findings from Toma et al. (2008), our first hypothesis predicts that specific social network information (in the form of social network connections) will constrain resume deception relative to resumes without social network information.

H1: Deception will occur less frequently in resumes with social network information, than in those without social network information.

In addition to discrepancies in frequency, lies should also vary by type. Previous research indicates that different self-presentational goals lead to different types of deception (Feldman et al, 2002). For instance, DePaulo et al. (1996) conducted a study in which participants were asked to keep diaries with the number of lies that they told per day. Participants' lies were classified in terms of content, type, referent and reason. By categorizing the lies along these dimensions they observed that undergraduate women and men lied with the same frequency, but women told more lies to enhance others and men told more self-enhancing lies. Similarly, when provided with self-presentational goals of appearing likeable and competent, lies differed in content and type (Feldman et al., 2002). Individuals presented with the self-presentational goal of appearing likeable tended to tell more outright lies (i.e., completely false), while individuals who had the self-presentational goal of appearing competent tended to tell more subtle lies (i.e., lies of omission).

These findings are especially interesting in the present context because they suggest that deception should differ by type as self-presentational goals are affected by the SNS environment. When creating a resume, everyone holds the same self-presentational goal of appearing attractive to the potential employer (e.g., competent, skilled, dedicated, interesting, etc.). However, because SNS presentations are available to

the social network, a warrant is created between the actual and virtual self, which suggests that participants should be motivated to modify the types of lies they use in constructing their self-presentation. In particular, they should employ deceptions that are difficult to detect by members of their social network but may have some value in achieving their self-presentational goal of being attractive to the employer. If this is the case, then relative to lies in profiles without specific social network information, lies in profiles with specific social network information should be more subtle and less outright as they are more difficult to detect by the individual's social network.

H2: Resumes with social network information should involve more subtle lies or exaggerations, but fewer outright lies than resumes with out social network information.

Though the types of deception described in DePaulo et al.'s (1996) interpersonal taxonomy of lies may reveal differences in deception based on whether or not an individual's profile is available to the social network, the taxonomy was developed to classify everyday types of deception. The self-presentational goals of deception in daily interactions (i.e., to appear likeable, to appear honest, etc.), in Ftf and mediated environments, may be markedly different from those engaged when creating a SNS resume (i.e., appear competent), which suggests that individuals may engage in different, job-specific types of deception to meet the self-presentational goal of appearing attractive to an employer.

Based on this assumption, lies generated to meet the self-presentational goal of appearing competent should be related to job or activity-specific characteristics, such as responsibilities, skills, abilities, interests, etc. Deception in this case should also be shaped by the likelihood that members of the social network will be able to identify deception. In particular, deception that is difficult to detect by the social network, or that is not a costly lie, should take place more often in resumes with specific social network information than in those without due to the presence of a warrant between the actual and virtual self. If that is the case, then lies in resumes with social network information

should focus more on types of deception that are difficult to objectively verify, such as hobbies and interests, while lies in resumes without social network information should focus more on types of deception that could more easily be objectively verified, such as job experience and skill sets.

H3: Resumes with social network information should involve fewer resume-related deceptions, but more interested-related deceptions than resumes with out social network information.

Publicness of Presentation Condition

The second set of hypotheses address how the publicness, or presentation condition (i.e., traditional, private or public SNS resume), of an individual's resume, or SNS profile, affects the frequency and type of deception that individuals engage. Three presentation conditions with differing levels of publicness were used in posing these hypotheses. The first was the traditional resume condition, in which participants created an offline resume in a Microsoft Word® document. The second was the private SNS condition, in which participants created a resume in a web-based SNS, but without making that resume public to anyone else on the site. The third condition was the public SNS condition, in which participants created a resume in the same web-based SNS that was public to anyone online. The private SNS condition acted as a comparison condition that allowed us to check for any differences that may have emerged from constructing a resume in a web-based profile rather than a document.

As mentioned earlier, the publicness of an individual's resume should shape patterns of deception by providing a warrant that increases the connection between the actual and virtual self (Walther & Parks, 2002) and thus increases the potential costliness of deception (Donath, 1999). The first hypothesis thus predicts that the public SNS condition will constrain deception in online resumes.

H4: Resumes constructed in the public SNS condition should have fewer deceptions than resumes in the traditional or private SNS resume conditions.

The fact that resumes will be available to anyone online should also motivate individuals to modify the kinds of lies they use in constructing their self-presentation. Specifically, as mentioned earlier, they should lie about characteristics that are difficult to identify by known others online, but may have value in meeting the self-presentational goal of appearing competent for employment. If this is the case, then relative to lies produced in private SNS resumes and traditional resumes, lies in public SNS resumes should be more subtle and less outright as they are less easily recognizable by known individuals online.

H5: Resumes constructed in the public SNS condition should involve more subtle lies or exaggerations, but fewer outright lies than in traditional or private SNS resumes.

As mentioned earlier, resume-related types of deception, which follow the self-presentational goal of appearing competent, may be more useful in demonstrating differences between presentation conditions, than everyday types of deception (DePaulo et al., 1996), which may follow a variety of different self-presentational goals. Resume-related types of deception are more suitable to the specific self-presentational goal of appearing competent, whereas everyday types of deception are more suitable for a broader range of self-presentational goals engaged on a daily basis. Similar to the prediction in H4, the content of the lies may be shaped by the likelihood that known individuals online will be able to identify deception. Lies that are difficult to detect by known individuals online should occur more frequently in public SNS resumes than in traditional and private SNS resumes. If that is the case, then lies in public SNS resumes should be related to hobbies and interests, while lies in traditional and private SNS resumes should focus more on job experience and skill sets.

H6: Resumes constructed in the public SNS condition should involve fewer resume-related deceptions but more interest-related deceptions compared to traditional or private resumes.

METHOD

Overview

The above hypotheses were tested using a 2 x 3, between subjects experiment. All participants were asked to create a resume either offline as a Microsoft Word® document (traditional resume) or online in the form of an equivalent Linkedin® profile that was either private or public, and either contained links to their social network or did not (see appendix A for detailed protocol). Participants were randomly assigned to one of the five conditions. All participants were asked to create resumes for a specified job, with the prospect of the best-fitting resume for the job winning a $100 gift card. This manipulation provided a subtle incentive for students to be more deceptive on their resumes.

Participants

One hundred and twenty-three undergraduate students enrolled in Communication courses at a medium-sized university in the Northeast United States participated in the experiment for course or extra credit. Participants were between 18 and 22-years-old, with 29.2 percent male participants and 66.2 percent female participants. The majority of students were underclassmen (26.9 percent freshman and 33.8 percent sophomores), while seniors were the least represented (11.5 percent), followed by junior students (21.5 percent). Participants came to the lab at a pre-selected time and were randomly assigned to one of the five experimental treatment conditions. All participants provided informed consent prior to receiving study-related materials and were debriefed at the conclusion of the experiment.

Stimulus Material

Participants were given a job description based on an altered Sotheby's® International Marketing Consultant position. The position's description was altered to make the job more desirable by 1) providing a lucrative starting salary with sign-on bonus, and 2) providing appealing international office locations. Additionally, the

description's credentials were enhanced to ensure that most undergraduate students would have difficulty meeting the recommended qualifications. Though an entry-level job description could have been used for the undergraduate participants, the description was altered in this way to challenge participants, who may not have engaged in deception if they already met job qualifications. See Appendix B for full job description. Participants were instructed to tailor their resumes using their personal experiences and skills to ensure that they would be the most qualified candidate for the described job, with the added incentive of the "best-fitting" resume for the job winning a $100 gift card. Participants were not instructed or encouraged to lie, but rather were urged to use their own information in a way that would present themselves as the best candidate for the described position.

Experimental Treatment Conditions

As mentioned above, the study explored two sets of hypotheses, with participants placed in different conditions based on these hypotheses. The first set of hypotheses was used to determine the impact that social network information had on the practice of deception and was tested by comparing deception when social network links were present or not. A key feature of the Linkedin® website allows individuals to make connections with former employers or colleagues as a validation of their credibility, experience, skills and abilities. This feature was used to manipulate social network information by asking participants to provide the names of potential connections (i.e., supervisors, colleagues, professors, family and friends), with whom they will be asked to form connections after creating their profile. Participants assigned to the links presentation conditions were asked to provide the names of 10 people (2 supervisors, 2 colleagues, 2 professors, 2 friends and 2 family members) and were led to believe that they would create connections with these people via their Linkedin® profile later in the study.

The second set of hypotheses was concerned with the impact of presentation condition on deception and was tested by comparing deception when the profile was a

private SNS profile, a public SNS profile, or a traditional offline resume (produced in a Microsoft Word® document). Participants in the private SNS condition created their resume as a profile on the Linkedin® website but were told that their profile would be created with the privacy settings turned on so that their profile could not be viewed by anyone unless they allowed them to do so. Participants in the public SNS condition also created their resume as a profile on the Linkedin® website, but were told that their profile would be public and viewable by anyone online. Participants in the offline condition created a profile in a Microsoft Word® document. All of the components in the offline condition mirrored the profile categories of the Linkedin® profiles to control for differences related to the information presented on the web interface.

Procedure

Participants were presented with the opportunity to participate in the study during their regularly scheduled communication class lecture. After preselecting a participation session, participants came to the lab where they first read and signed an informed consent form. Then, all participants were taken to an isolated room with a single computer. Participants in the link conditions first asked to fill out a worksheet requesting the names of 10 potential network connections. Participants in this condition were told that they would make connections with these individuals after completing their profile, but no connections were actually made as this was simply part of the manipulation.

All participants were then instructed to create their resume, either on LinkedIn® or in Microsoft Word®, based on the provided job description. Participants were instructed to treat the activity as an actual job application, with the added incentive of the "best-fitting" resume winning a $100 gift card. Participants were given 30 minutes to complete the resume filling out experience, education, and additional information sections, after which they alerted the researcher via an intercom.

The experimenter then gave participants instructions to fill out a series of questionnaire items via the online survey tool, Surveymonkey®, that are not reported

here. Participants were left for 15 minutes to complete questionnaire items related to their experience creating the resume, their perception of the job, and their demographic characteristics. After completing questionnaire items, participants alerted the researcher via intercom.

In the final phase of the experiment, the researcher revealed the true purpose of the study: to assess deception in resumes. The researcher assured participants that the study made no judgments about the valence of deception and that deception on resumes is a common occurrence (George et al., 2004). Participants were asked to take 15 minutes to reveal and describe all of the deception in their profiles via a worksheet. See Appendix C for worksheet. In the first column of the worksheet participants were asked to write the deception, exactly as it appeared in their profile (i.e., Deception: Proficient in Microsoft Outlook). In a neighboring column a more truthful version of the deception was requested (i.e., More truthful version: Never heard of Outlook). In a final column, participants were asked to provide the section of the profile where the deception appeared (i.e., education, experience, or additional information). Lastly, participants were debriefed and dismissed. See Appendix D for debriefing form.

Coding Types of Deception

Coding for the Interpersonal Lie Taxonomy. DePaulo et al.'s (1996) interpersonal lie taxonomy was used first to classify participants' deceptions and the more truthful versions of their deceptions. Lies were coded into three specific types and a final "other" category that was reserved for deceptions that did not conform to the taxonomy. Outright deceptions are those that convey information that directly opposes the truth (i.e., Deception: Maintained strong ties with external org, Truth: Had an underling do it). Exaggerations are lies in which some greater or lesser version of the truth is conveyed (i.e., Deception: Great computer skills in Indesign, Truth: General idea). Subtle deceptions are those that purposely exclude pertinent information in order to misinform or mislead (i.e., Deception: Member of Cornell design league, Truth: no

application/selection; Involved, go to meeting once a week). Figure 2 provides additional examples.

Interpersonal Lie Taxonomy	Definition	Deception	Truth
Outright	Total fabrications; information is completely different from truth.	- 100+ entries for business idea competition - Supervisor at Ripen Public School Pool	- 50+ entries - Title was attendant
Exaggeration	Deception differing in magnitude; overstatement or understatement of a specific fact.	- Attending regular Cornell Film Club meetings - Seal and Serpent Society brother	- Attend occasional meetings - Pledge (will be brother after Spring Break).
Subtle	Deception by leaving out pertinent information; also lies that purposely mislead.	- President B-Aware - Cornell Synchronized skating (official national competitor)	- President only one semester - Only been to nationals once

Figure 2. Taxonomy of deception by type based on interpersonal lie taxonomy.

Based on the above content definitions, the researchers developed a coding scheme (see Appendix E for full coding scheme) and trained research assistants to code the first and last 50 lies in the data set. After training, the research assistant and researcher coded the entire data set of 378 lies ($\kappa = .70$).

Coding for the Resume-related Lie Taxonomy. Though DePaulo et al.'s (1996) interpersonal lie taxonomy provides an established method of classifying deception, lies on resumes may be inherently different from lies that are told in everyday interactions. As mentioned in the introduction, the self-presentational goals in these settings are often markedly different, and thus individuals may use different strategies when being deceptive. After thoroughly reviewing deceptions provided by participants, the researchers were able to identify four types of deception and created the Resume-related lie taxonomy.

Lies related to *responsibility* are those that in some way discuss a person's responsibilities at a job or with a volunteer organization, or activity (i.e., Deception: In charge of 50 students as news director of Columbia Cable network, Truth: Only directly in charge of 30 and a lower class, indirectly in charge of about 25). Lies related to *abilities* or *skills* are those that indicate the ability to use software, language, or anything that involves some level of expertise. These lies may also include awards or honors given that provide recognition for some level of ability (i.e., Deception: Proficient in Japanese, Truth: Beginner). Lies related to *level of experience* or *involvement* are those that indicate a greater or lesser degree of participation in some specific activity or job (i.e., Deception: Intern at Long Islander Newspaper from 8/06-6/07, Truth: Intern from 10/06-5/07). Lies related to *interests* or *motivations* relate to any deception that indicates interest, motivation or concentration that is in some way false (i.e., Deception: Marketing is my best fit, Truth: I'm not interested in marketing at all, just in the high salary). Figure 3 provides additional examples.

Resume-related Lie Taxonomy	Definition	Deception	Truth
Responsibility	Lies that discuss implicit and/or explicit job or activity-specific duties.	- 9 students work for my company - Organize museum spring benefit	- 6 students work for my company - Helped staff who organized.
Abilities	Deceptions indicating ability to use specific software, language, etc.; lies related to recognition (i.e., honors, awards) for skills or abilities.	- Familiarity with Adobe Suite - Post-standard "Voices Award" winner	- Not familiar with Adobe Illustrator - Only a contributing writer
Level of Involvement	Lies indicating a greater or lesser degree of participation in some specific activity, job, etc.	- National society of collegiate scholars 8/2007 - present	- Member, but only attended 1 meeting
Interests	Deception indicating interest, motivation or concentration that is in some way false.	- Major concentration in media studies - Marketing is my best fit.	- Not sure what my major concentration is - I'm not interested in marketing at all, just in high salary.

Figure 3. Taxonomy of deception by type based on Resume-related lie taxonomy.

Based on the above types of deception, the researchers developed a coding scheme (see Appendix F for full coding scheme) and trained a research assistant to code the first and last 50 lies in the data set. After training, the research assistant and researcher coded the entire data set of 378 lies ($\kappa = .76$).

RESULTS

Simple descriptive statistics were first used to assess means for frequency of deception, as well as means comparing frequency of deception by gender. Overall, participants in the study lied on average 2.93 times in their resume, with the most frequent number of deceptions being 2 and the median number of deceptions 3. Out of the 123 participants, 9 (7.3 percent) individuals reported that they did not lie at all in their profile, while the greatest number of lies reported in a resume was 10. On average, women tended to report fewer lies (2.80) than men (3.24), but there was not a significant gender difference in frequency of deception. Freshman students lied slightly more on average, 3.34 times, while sophomore students lied the least of all on average, 2.73 times. Junior and senior students lied at similar rates (3.07 and 2.93). Consistent with previous research (i.e., Toma et al., 2008), the frequency of deception is relatively low.

An additional feature of the data worth mentioning is that due to the relatively large number of participants who did not lie on their resumes, the data set is positively skewed. Although the data has a non-normal, positively skewed distribution, the majority of analyses that follow use a general linear model approach, which previous research shows is robust against a violation of normality assumption, given that sample sizes are sufficiently large and there is similar variance between groups (Jones, Onslow, Packman, & Gebski, 2006).

Social Network Information

Frequency of Deception. The first hypothesis of interest referred to whether the presence of social network information affected the amount of lies that an individual told. Participants' deception was assessed via self-report. Using the worksheet that

participants completed at the conclusion of the study, we counted the number of deceptions that each participant reported to obtain a frequency count of deception. The hypothesized relationship was assessed using a one-way Analysis of Variance (ANOVA), with social network information (absence or presence) as the independent variable and frequency of deception as the dependent variable. Analyses with the social network independent variable only used data from Linkedin® profiles in analyses, due the fact that traditional resumes would not have the potential to create links as they are not presented in the SNS context. The analysis revealed that the presence of social network information did not affect the frequency of participants' deception $F(1, 79) = .01$, $p = .91$. Table 1 describes the means and standard errors for frequency of deception as a function of social network information.

Although the above analyses revealed no significant findings, it is possible that participants may have produced different rates of deception as a function of word count. That is, participants in one condition may have produced more lies because they also produced more words in their resume. To control for this possibility, the proportion of profile deception was calculated by dividing the total number of deceptive words in the profile by the total number of words in the profile. This analysis revealed that the presence of social network information did not affect the proportion of deception in profiles $F(1, 79) = .47$, $p = .49$. Table 1 describes the means and standard errors for proportion of deception as a function of social network information.

Table 1. The frequency of deception (total count and proportionate to word count) across social network information condition.

	Deception Frequency		Proportion of Deception	
	M	SE	M	SE
No SNS Information	2.95	.31	.06	.01
SNS Information	3.00	.32	.06	.01

Types of Deception. The next hypotheses of interest concerned whether specific social network information shapes the types of lies told. We used two taxonomies to assess deception type: DePaulo et al.'s (1996) interpersonal lie taxonomy, which was developed to classify everyday types of deception, and the Resume-related lie taxonomy, which focuses on the specific types of information involved in deception in the resume context.

For the interpersonal lie taxonomy, all deceptions were coded as either outright, exaggeration, subtle, or other. The analysis tested whether type of deception varied based on the presence or absence of social network information (H2). The hypothesized relationship was addressed with a multivariate ANOVA (MANOVA), using social network information as the independent variable and frequency of each type of deception from the interpersonal lie taxonomy (DePaulo et al., 1996) as the dependent variable. A MANOVA was necessary for this analysis as lies were nested within subject, thus variables representing frequency counts for each type of deception were used as dependent variables. The analysis revealed non-significant differences in types of deception between those profiles with social network information and those with out F(3,

77) = .20, p = .90. Table 2 describes the means and standard errors for the frequency of the three types of lies by social network information condition.

Table 2. Mean frequency of deception by everyday lie type across social network information condition.

	Subtle		Exaggeration		Outright	
	Mean	SE	Mean	SE	Mean	SE
No SNS Information	.46	.13	1.60	.24	.71	.16
SNS Information	.37	.13	1.65	.24	.85	.16

The lack of effect in the resume context may be related to the fact that DePaulo et al.'s (1996) taxonomy was developed specifically to classify everyday, interpersonal deceptions rather than resume-based deception. As noted earlier, to address this limitation we developed the Resume-related lie taxonomy to assess deception across the different categories of information present in resumes. All deceptions were coded as related to responsibility, abilities, level of involvement, or interests. The means and standard errors of the frequency of deception for each type of information are displayed in Table 3.

A similar MANOVA was used to address the hypothesized relationship between the presence of social network information and resume-related types of deception (H3). The analysis, with the frequency of each of the four types of deception entered as dependent variables and social network information entered as the between-subjects variable (H3), revealed a non-significant effect of social network information on the resume-related kinds of information involved in the deception, $F(4, 76) = .62$, $p = .65$, suggesting that social network information did not have a significant effect on the types of lies participants told.

Table 3. Mean frequency of deception by resume info type across SN info condition.

	Responsibilities		Abilities		Involvement		Interests	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE
No SNS Information	.61	.12	1.22	.19	.80	.14	.19	.10
SNS Information	.50	.12	1.15	.19	.90	.14	.32	.10

Publicness of Presentation Condition

Frequency of Deception. The first question of interest was whether presentation condition (i.e., public SNS vs. private SNS vs. traditional resume) would shape the frequency of participants' deception (H4). The hypothesized relationship was examined with a one-way ANOVA, with presentation condition as the independent variable and frequency of deception as the dependent variable. Table 4 describes the means and standard errors for frequency of deception as a function of presentation condition. Contrary to expectations, presentation condition did not significantly affect the frequency of participants' deception $F(2, 120) = .21$, $p = .81$. Although the trend was consistent

with our expectation that the public SNS condition would have the fewest lies, this trend did not achieve significance.

An additional analysis was conducted to establish whether the proportion of deception to total words in a profile was smaller in resumes in the public SNS presentation condition compared to resumes in the traditional and private SNS presentation conditions. Consistent with the frequency analysis above, there was no effect of condition on the proportion of deceptions reported, $F(2, 119) = .77$, $p = .466$. Table 4 describes the means and standard errors for proportion of deception as a function of presentation condition.

Table 4. The frequency of deception (total count and proportionate to word count) across presentation condition.

	Deception Frequency		Proportion of Deception	
	M	SE	M	SE
Traditional Resume	3.02	.30	.07	.01
SNS private	3.00	.28	.06	.01
SNS public	2.78	.30	.06	.01

Types of Deception. The next hypotheses of interest concerned whether presentation condition shapes the types of lies told. As mentioned earlier, we used two taxonomies to assess deception type: DePaulo et al.'s (1996) interpersonal lie taxonomy (everyday types of deception) and our original taxonomy of resume-related types of deception. The next hypothesis, which predicted the relationship between presentation condition and everyday types of deception (H5) was addressed using a MANOVA, with presentation condition as the independent variable and frequency of everyday types of deception as the dependent variable. Table 5 describes the means and standard errors for

the frequency of the three types of lies by presentation condition. Presentation condition did not affect the types of deception employed in the resumes, $F(2,120) = 1.36$, $p = .26$. Although differences between the types of deception were not significant, individuals seemed to tell slightly more outright lies in traditional resumes and private SNS, than in public SNS. Additionally, people tended to tell slightly more exaggerations in public SNS, than in private SNS and traditional resumes.

Table 5. Mean frequency of deception by everyday lie type across presentation condition.

	Subtle		Exaggeration		Outright	
	Mean	SE	Mean	SE	Mean	SE
Traditional Resume	.48	.12	1.60	.23	.81	.17
SNS private	.40	.12	1.5	.23	.85	.18
SNS public	.44	.12	1.71	.23	.70	.18

A similar MANOVA was used to address the hypothesized relationship between presentation condition and resume-related types of deception (H6). The means and standard errors of the frequency of deception for each type of information are displayed in Table 6. An analysis, with frequency of the four types of deception entered as dependent variables and the presentation condition entered as the between-subjects variable (H6), revealed a significant effect of self-presentation condition on the kinds of information involved in the deception, $F(2, 119) = 3.21$, $p = .01$, suggesting that the presentation condition had a significant effect on the types of lies participants told.

Table 6. Mean frequency of deception by resume information type across presentation condition.

	Responsibilities		Abilities		Involvement		Interests	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Traditional Resume	.25	.04	.45	.05	.28	.04	.02	.02
SNS private	.21	.04	.43	.05	.28	.04	.07	.02
SNS public	.17	.04	.40	.05	.31	.04	.11	.03

To inspect the effect from H6 more closely, we conducted a univariate analysis along each dimension. The univariate analyses revealed a significant effect of publicness condition for lies about one's interests, $F(2,120) = 4.47$, $p = .01$. Post hoc tests (Tukey HSD) revealed that the resumes in the public condition contained significantly more lies than the traditional resume ($p = .01$) and marginally more than the private condition *(p = .08).* This pattern of results revealed that lies about relatively unimportant content, such as one's interests, were observed most frequently in the public SNS condition.

No significant effects were observed for the other three categories. Note, however, that the public SNS condition led to fewer lies about responsibilities than in the private SNS and traditional resume conditions, although this effect did not reach significance at the univariate level [$F(2,120) = .51$, ns]. Similarly, there were fewer lies about ability than in the traditional resume and private SNS presentation conditions,

though again this effect did not reach significance at the univariate level, [$F(2,120) = .56$, ns]. Finally, lies about involvement did not follow expected trends, with the traditional resume and private SNS conditions involving the fewest lies on this dimension, though once again this pattern did not achieve significance [$F(2,120) = .72$, ns].

Although the differences in the other lie types did not reach significance at the univariate level, consistent with our expectations that the public SNS condition would involve fewer lies detectable by their social network, participants in the traditional resume condition tended to deceive more about responsibility, followed by individuals with private SNS profiles, who deceive more about responsibility than individuals with public SNS profiles.

Interaction of Social Network Information and Publicness of Presentation

A final set of analyses were used to determine whether an interaction effect was present between social network information and the publicness of the presentation condition. Analyses were conducted on each of the dependent variables (i.e., frequency of deception, proportion of deception, and types of deception from the interpersonal lie taxonomy and Resume-related lie taxonomy). All analyses returned non-significant results, revealing that an interaction effect between social network information and the publicness of the presentation condition was not present.

Summary of Results

In summary, results from this experiment suggest that the frequency of deception on resumes does not differ based on whether the profile is traditional, private SNS or public SNS (H4), nor does it differ based on whether social network information is present (H1). Additional analyses to explore whether the proportion of deception differed based on whether the resume is traditional, private SNS or public SNS, or whether social network information is provided, revealed no significant differences between groups.

Further analyses conducted to determine whether differences in types of deception occurred using DePaulo et al.'s (1996) interpersonal lie taxonomy revealed that there were no significant differences based on whether the resume was traditional, private SNS or public SNS (H5), or whether social network information was provided (H2). Lastly, analyses using the original Resume-related lie taxonomy, revealed significant differences between types of deception based on whether the resume was traditional, private SNS or public SNS (H6), but non-significant differences between types of deception based on whether social network information was provided (H3).

Additional analyses, which were conducted to explore the significant relationship between resume-related deceptions and self presentation condition, revealed that individuals in public SNS condition lied significantly more about interests than individuals in the private SNS condition, who lied marginally more about interests than individuals in the traditional resume condition. Final analyses, which included all independent variables and the interaction of the independent variables with frequency and type of deception as dependent variables, revealed that there was not an interaction effect between presentation condition and social network information.

DISCUSSION

Though popular belief suggests that the online environment is rife with deception (Caspi & Gorsky, 2006), the results from the present study suggest this assumption seems to be overly simplistic. In conducting this study, we sought to demonstrate how features of SNS, specifically social network information and the publicness of self-presentations, shape the practice of deception. Rather than deception being generally rampant online, our findings indicate that warrants created by affordances of the communication environment and self-presentational goals seem to be more important in determining how lying takes place.

Social Network Information and Deception

Our initial hypotheses argued that resume self-presentations that are available to one's social network should be less deceptive than those that are not available to the social network. By providing access to specific members of the network, Walther and Parks (2002) argue that the social network acts as an important warrant in tying the physical and online self. The social network not only provides an audience to which the individual must provide explanation for deceptions, but also consists of individuals who can verify information as deceptive. Though warranting relates specifically to other's perception of the individual, in the case of this study, we predicted that the knowledge of others' perceptions would also shape the way that that individuals engaged in deception.

Though our hypotheses predicted that social network information would constrain frequency of deception and encourage less easily identifiable types of deception, we failed to find that the presence of social network connections significantly affects deceptive practices. Although it may be the case that these kinds of links do not affect deception, there are several possibilities that may have played a role. Participants may not have believed that their social network connections would correctly identify deception, given that this act requires time and effort on the part of the judge. Additionally, participants in social network information conditions may have listed weak ties or acquaintances (i.e., supervisors, colleagues and professors) as social network connections. Presumably these individuals would not know the participant well enough to correctly identify deception in their profile. The fact that strong ties, such as family members and friends, were also requested as social network connections may have also reduced the impact of warranting. Although these individuals may know the participant well enough to correctly identify deception, they may not pass social judgment on the individual for being deceptive as they are more concerned with positive outcomes for the individual (i.e., obtaining a job). We did not gather network-specific information

regarding the strength of social network connections, thus these explanations are purely based on speculation.

The lack of findings related to social network information must also be interpreted with caution given that no formal manipulation check was conducted to determine if participants truly believed that their social network links would actually be connected to their profile. Participants in social network information conditions were asked to provide the names of 10 individuals with whom the researcher would be linking them later in the study. Participants were only asked to provide names of these individuals and did not have to establish these connections before creating their online resume. Connections with people could only be established under one of the following two circumstances: 1) the potential connection is a current member of Linkedin® and must confirm that they wish to be connected with the requester, or 2) the potential connection is not a member of Linkedin® and must first become a Linkedin® member before a connection may be established with the requester. Even if the participant believed that they would be asked to request these connections later in the study, they may have reasonably concluded that they could prevent these connections from being established.

Future studies should ensure that participants believe members of their social network will be able to view profile information. These studies should also assess the effectiveness of this manipulation using a manipulation check. Additionally, future studies should gather specific information about social network connections, as these characteristics may also alter the warranting value of certain members in the social network.

Publicness of Presentation and Deception

Walther and Parks' (2002) concept of warranting was also used as the theoretical framework for proposing hypotheses that sought to determine the effect that the publicness of presentations had on patterns of deception, both in terms of frequency and type. Our main prediction was that publicly available self-presentations should be less

deceptive than private self-presentations and traditional, offline resumes. Theoretically, this is because the social network acts as a warrant (Walther & Parks, 2002) between the participant's actual and virtual self. Our expectation that this warrant would reduce the frequency of deception in self-presentations made publicly available was not realized. Nonetheless, we did not observe more deception in the web-based SNS self-presentations compared to the traditional resume, an observation that is counter to the popular assumption that people are more deceptive online.

We also failed to observe differences between groups in the types of deception identified by DePaulo et al. (1996) in the interpersonal lie taxonomy, though this pattern is perhaps not surprising. Given that the interpersonal lie taxonomy was developed using daily diaries of deception, we would expect that the taxonomy would be more appropriate for classifying everyday types of deception. The self-presentational goal that is activated while developing a resume (i.e., appearing competent for employment) is potentially, though not necessarily, different than self-presentational goals activated during day-to-day interactions (i.e., appearing likeable, appearing honest, etc.).

Contrary to findings using DePaulo et al.'s (1996) interpersonal lie taxonomy, there was evidence that the warrant of the public SNS changed the nature of the deceptions using the Resume-related lie taxonomy. We saw a general pattern suggesting that participants tended to lie strategically depending on whether or not their SNS profile would be publicly available (i.e., warranted or warrantless). In general, participants in the public SNS condition tended to lie less about information directly related to job experience and more often about unrelated information, although the predicted trends did not achieve significance. However, in the public SNS condition people lied more about their interests than those creating private or traditional resumes.

Warranting predicts that because the presence of the social network increases the connection between the actual and virtual self, individuals should always alter patterns of deception in order to avoid: 1) having to provide explanation to the social network for

deceptions and 2) the potential for social network members to verify deception with other individuals. On one hand, warranting explains the fact that, in general, participants in the public SNS condition did not deceive more about job responsibility, though these findings did not reach significance.

On the other hand, warranting does not predict that deception would increase in the presence of a warrant, which is precisely what occurred when participants in the public SNS condition deceived more about interests than individuals in the traditional resume and private SNS conditions. Nonetheless, warranting may partially explain the pattern of results. First, interests in resumes represent relatively unimportant aspects of a self-presentation for getting a job. Furthermore, interests tend to be difficult to objectively verify. If a participant, for example, said that she enjoys traveling when in truth she really doesn't like traveling, it would be difficult for members of the social network to objectively verify this. Compare that type of lie with a deception about responsibilities or involvement in a previous job, such as saying that that she worked at a position for longer than she did, or at a higher level of responsibility. This kind of lie can be easily identified by former colleagues or bosses. As such, warranting would predict that lies about interests, which are hard to detect, may still be produced in an environment with a warrant.

But to understand why lies about interests were produced *more* in the public condition than in the other conditions, we need to consider how the public condition may have affected self-presentational goals. Recall that self-presentation involves molding behaviors to encourage specific impression formation, taking both audience and context of an interaction into account (Goffman, 1959). One possibility is that the public nature of the public SNS condition enhanced participants' goals of appearing attractive or interesting. Individuals fulfilled their self-presentational goal of appearing attractive to employers by engaging in deception that would make them appear more suitable for the

described job (i.e., lies related to interests), without the consequences of being caught in a more verifiable lie (i.e., lies related to responsibility).

For example, in their profile one participant in the public SNS condition stated, "looking to attain position as an international marketing consultant," when the more truthful version of their deception was, "not interested." Considering that the provided job description was for the position of an international marketing consultant, this deception could help to make the person seem motivated to work in the field, without having to deceive about anything concrete that might be identified by members of their social network. Participants in the traditional resume and private SNS conditions, lied at the same rate as individuals in the public SNS condition, but rather than lying about interests, which are less important characteristics to consider when hiring, engaged in deception related to concrete characteristics (i.e., responsibilities, skills, involvement, etc.) without being concerned with judgment or exposure by individuals in their social network.

In this study we present the first test of warranting as it affects behaviors, rather than simply perceptions, and our findings suggest that when using warranting to make predictions regarding deceptive behaviors self-presentational goals, which compete with the presence of warrants, must also be considered. Future endeavors exploring warranting from a behavioral perspective should incorporate self-presentational goals into a unified theoretical framework, which accounts for motivations behind behavior as well as the constraining effects of warrants. The following section explores additional factors that should be considered when approaching warranting and self-presentation from a behavioral perspective.

Other Factors Important to the Warranting-Self-Presentational Framework

The findings from the present study add to an emerging literature describing how characteristics of online communication environments can act as warrants in constraining deception as well as self-presentational goals in motivating deception. For example,

media with higher levels of recordability increase the opportunity for information to be accessed and thus represent a warrant by more closely tying the individual with specific, accessible information about oneself. One of the most recordable media to date is email, which allows copies of communication exchanges to be saved on multiple computers. Hancock et al. (2004) demonstrated that deception occurs less frequently as media becomes more recordable.

Walther's (1996) anticipated future interaction (AFI), or the expectation that an interlocutor will meet an online communication partner FtF, is an additional feature of online communication that creates a warrant. One study conducted in the context of online dating (Gibbs et al., 2006) demonstrated that the more online daters were interested in establishing FtF relationships, the more honest they claimed to be in their communication, demonstrating that AFI can also act as warrant, constraining deception.

Certain features of online communication environments may also motivate deception as they relate to self-presentational goals. For example, the mediated space of the online environment encourages the practice of selective self-presentation (Walther, 1996), which allows individuals to highlight positive personal characteristics and downplay negative characteristics when interacting online, without communication partners recognizing that this information has been omitted, as they could in FtF contexts. For example, a person may only choose to include flattering pictures in their Facebook® profile, which allows them to present a much more attractive image of themselves than they could when interacting FtF. Selective self-presentation is motivated by the desire to present oneself in a positive light, without having to provide explanation for or overcome less desirable characteristics.

An additional feature of the online environment that encourages individuals to meet self-presentational goals through deception is the asynchronicity of online communication. Asynchronicity allows for a time lag in communication between interlocutors. Unlike a FtF conversation, asynchronous conversations provide the

individual with the time needed to edit and package communication before providing a response. This time lag provides the interlocutor with the opportunity to shape communication, both deceptive and truthful, to meet self-presentational goals online.

Psychological Mechanisms

The abovementioned factors related to warranting and self-presentational goals are important external mechanisms that will help researchers to understand the practice of deception online, but how do internal or psychological mechanisms affect the practice of deception online? Mazar, Amir and Ariely's (2005) model of internal and external incentives may help to explain the interplay between external and internal mechanisms in shaping deception. Their model suggests that people will be deceptive to reap external rewards, but only to the point that they feel is socially acceptable. Their argument is that people will lie a little to receive external benefit, but not so much that they perceive themselves as "liars." In their study, they observed that when external constraints to cheating (on a test with the prospect of monetary reward for correct answers) were removed, people still cheated very little, even when given the opportunity to cheat without the possibility of being caught.

We see support for this pattern of deception in our study and other previous studies. In our study, 92.7 percent of participants lied at least once on their profile, which closely mirrors findings from George's (2004) study in which 90 percent of participants lied on a resume-like scholarship application at least once. Similarly, 81 percent of daters lied in their profiles in Toma et al.'s (2008) study of online dating websites. Though most people lie a little bit in variety of contexts, which Mazar et al. (2005) also observed in their study, our findings also demonstrated that on average people only lied 2.93 times in their resume. Just as Mazar et al. (2005) demonstrated in their study of cheating, participants seem to have lied a little in hopes of enjoying the external reward of appearing competent for employment, but only to a point. Though these findings provide information related to the frequency of deception, they can not demonstrate the

magnitude of deception, or how much the provided information actually deviates from the truth.

Future research must address this question of magnitude because although participants may have lied with great frequency on profiles, this information tells us nothing about how serious or damaging deceptions were. For example, if a participant lies about having a management role, the magnitude of deception is far greater than a lie about how frequently a person attends club meetings. Mazar et al.'s (2005) model would predict that the magnitude of deception would be generally low in this future research, based on the activation of external mechanisms.

Future Research

Though this study was able to explore Walther and Parks' (2002) concept of warranting from a behavioral perspective, rather than a perceptual perspective as previous research has, a future study should bring the focus back to perceptions, in this case exploring the perception of deception in the presence of warrants. Understanding deceptive behavior from the perspective of both the deceiver and the judge will help to provide a more detailed portrait of the predictive mechanisms associated with warranting.

In a recent meta-analysis, Bond and DePaulo (2008) demonstrate that, in general, people aren't very successful in accurately detecting deception with most individuals performing only slightly above chance levels in judging honesty. Their research also suggests that of the individual difference variables assessed in studies (i.e., judge ability, judge credulity, sender veracity and sender credibility) sender credibility had the greatest impact on whether a person would be determined as telling the truth, regardless of their actual truthfulness. Moreover, they determined that after correcting for sampling error, sender credibility accounted for nearly 200 times the amount of variance that judge ability did. Their findings suggest that people are at a disadvantage in terms of identifying deception, and must thus rely on preventing deception via modality constraints. Though researchers should be cautioned not to rely on individual judgments

in detecting deception, these judgments are nonetheless important to understand as they may be related to important individual outcomes in organizations (i.e., hiring, promotion, etc.).

Future studies should address questions about how employers judge the deceptiveness of profiles based on the modality features enabled in online resumes. For example, when a resume is publicly available, do potential employers use this as a signal that a profile is less deceptive? Also, do potential employers judge traditional resumes as more deceptive in comparison to those posted online? It seems that just as individuals in the present study lied strategically on resumes, engaging in different patterns of deception depending on the potential audience for the resume, judges should also expect this strategic behavior and judge profiles according to their level of publicness.

Lastly, future research should address how the presence of social network information in a profile and the specific characteristics associated with network connections affect how deceptive judges believe online resumes to be. As mentioned above, we believe that the link manipulation in this study failed due to not only to skepticism on the part of participants, but also as a result of the complexity involved in actually establishing links with the provided individuals. Even if the manipulation were successful, the study did not gather valuable information related to the strength and status of ties that would help to evaluate differences based on specific characteristics of the social network.

A future study should address the question: does the presence of social network information, as well as the specific characteristics of the network, provide a signal to judges indicating that an individual is more or less deceptive on a resume? This research would expand previous studies that explore effects related to network features such as the status and strength of social network connections (Lin, Ensel & Vaughn, 1981; Granovetter, 1983; Bian, 1997). This study should specifically address whether the

presence of specific network features (i.e., strength and status of ties) act as a signal that a profile will be more or less deceptive.

Bond and DePaulo's (2008) findings suggest that sender credibility is of utmost importance in determining sender veracity. The studies reviewed in their meta-analysis suggest that differing audiovisual cues help the individual to judge credibility, but how does the judge determine credibility in the context of SNS where these cues are absent? Walther et al. (2008) argue that in online contexts there are fewer observable cues than in FtF setting and often those available cues are easily altered by the sender. One exception is the presence of social network information, which can not be altered by the sender and thus is more reliable. In this case it seems that credibility judgments must be made using members of the social network as warrants for credibility.

We can revisit Toma et al.'s (2008) research in online dating, which demonstrates the constraining effects that social networking websites can have on the practice of deception. In their study, the greater the number of people who knew about the participants' profile, the more accurate participants reported the photograph on their profile to be. Based on their findings, we believe that profiles that include social network information will be judged as less deceptive than profiles without social network information.

Though the absence or presence of social network information should have significant effects on judgments of credibility (and thus judgments of veracity), it seems that whether the social network tie is strong or weak may also affect judgments of credibility. In the case of strong ties, the costliness of deceptive behavior should be magnified as the time spent with ties, emotional intensity of the relationship, intimacy in relationships (whether or not ties confide in each other) and reciprocity between ties (Granovetter, 1983) all suggest a greater costliness of deception in terms of experiencing social judgment and other potential consequences from those ties whose opinions the individual values more highly than weaker ties. It seems that the closer the relationship a

person has to members in their social network, the greater the costliness of deception, as individuals' want to be perceived as honest by significant others (Mazar et al., 2005). Assuming that individuals assess deception in a similar way that they practice deception, we believe that weaker ties with social network connections will lead to the perception of more deception, while stronger ties will lead to the perception of less deception.

Although it seems that as ties become stronger, subsequent credibility judgments would increase and perceptions of deception would decrease, the type of strong ties may also be a factor affecting credibility judgments. As mentioned earlier, though certain strong ties (i.e., friends and family members) may identify deception in profiles, they may be unlikely to form negative perceptions of the individual due to these deceptions because they are more concerned with positive outcomes for the individual (i.e., obtaining a job). These strong ties would be unlikely to inform a potential employer of the deception. In the case of these ties, the costliness of deception does not necessarily increase in the presence of the social network. Thus, it seems that when strong ties are friends and family members, more deception may be perceived.

Conclusion

Though this study failed to demonstrate many of the hypothesized relationships, overall it provides several contributions to the field of communication research. First, it provides the first test of Walther and Parks' (2002) warranting from a behavioral perspective, which until now has been studied from a perceptual perspective. Additionally, this study provides a new tool, the Resume-related lie taxonomy, for classifying deceptive statements related to the self-presentational goal of appearing competent for employment. By accounting for the organizational context, this study provides a useful tool for researchers in organizational communication, organizational behavior and other related fields. Finally, this study suggests a new framework for studying the practice of deception by incorporating Walther and Parks' (2002) warranting

with DePaulo et al.'s (1996) self-presentational goals in an attempt to understand these competing forces which both constrain and motivate the practice of deception.

At a more general level, we were able to examine the values inherent in the study of deception and provide a contribution to the current value judgments from an organizational perspective. According to DePaulo and colleagues (1996), many perspectives on the values of deception exist, describing it as everything from a threat to society's moral thread (Bok, 1978) to a social skill (DePaulo & Jordan, 1982; Nyberg, 1993). DePaulo and colleagues' (1996) research demonstrates that lying is a fact of daily life and occurs regularly often for personal psychological benefits (i.e., self-presentation). DePaulo and colleagues' (1996) findings reveal deception as a value-free resource used to carry out everyday life, but our study also identifies the potential for negative effects in an organizational setting.

McInerney (1992) identifies the pragmatic theory of truth, which suggests that the truth of theories is a based on the belief's usefulness. Although DePaulo and colleagues' (1996) perception of deception as an everyday occurrence is valuable and essential for everyday interaction, it becomes detrimental when deception to enhance self-presentation involves lying about attributes that may be necessary to perform well in an organization. In deciding whether or not our beliefs about deception are true, we must be sure to determine whether or not they apply practically (McInerney, 1992). Based on the negative effects that unethical organizational practices have had on the U.S. economy, we can see that practically it makes sense to determine the nature of deception on resumes and the motivations behind this deception in making value judgments about deception.

Longino (1996) tells us that our values are often shaped by the social system of which we are a part. Not only do these values determine the methods that we use to approach scientific questions, but they also shape the questions that we ask. Though traditionally contextual values, or individual and cultural values, have been considered separate from constitutive values, or the rules of scientific practice, Longino (1996)

suggests it is impossible to practice value-free science that is unaffected by contextual factors related to the individual or to the society. In a capitalist society, understanding behavioral processes in organizations is essential to upholding an economy and thus scientific questions are often shaped by this motivation.

In the case of this study it seems that values of organizational culture should be considered in comparison to individual values. That being said, it seems that just as DePaulo et al. (1996) believe deception is a value-free resource used to carry out everyday life, deception in organizations can be viewed similarly, but only to the extent that the deception does not become detrimental to the organization or individual. The evaluation of detriment is, of course, a complex one that may be different for each organization. For example, most organizations expect individual employees to share the organizational value of portraying the organization in a positive light and may encourage deceptive or truthful behavior that meets this end goal. This study helped to determine, at least partially, when individuals choose to be deceptive and with which motivations in mind. This understanding demonstrates that organizational values are not necessarily congruent with individual employees' values, as potential employees tend to lie strategically about characteristics that may be important to organizations in hopes of obtaining employment.

By developing a study that captured the social meaning associated with deception on online resumes, the proposed study may help to shed light on individual value judgments associated with deception in this setting. Though it seems that deception in organizations is an everyday occurrence as DePaulo and colleagues (1996) believe, this study at least partially illuminates the utility of deception for potential employees and the extent to which this deception could be potentially harmful or harmless in organizational settings. This research should be extended in order to better understand first, what it is that people are deceptive about and second, why they are being deceptive. This will help researchers to understand the personal values surrounding deception and determine

whether or not future questions will need to be asked in regards to curbing deception that encourages detrimental outcomes, or even, encouraging deception that encourages positive organizational and personal outcomes.

APPENDIX A

Protocol for "Resume Development Study"

Codes for Conditions:

O = Offline

PR = Private, no links

PRL = Private, with links

P = Public, no links

PL = Public, with links

1. Before participants arrive:

- Check the "Department of Communication Student Participation Form" to find out the condition and subject number of the next participant.
- Depending on their condition load either the Linkedin® website sign up page (www.linkedin.com) (PR, PRL, P or PL) or the Offline MS word document (O) on their computer.
- If they are in O: save their file as “Resume001” – (Note: 001 = the subject number you plan to assign them). Save in the computer's Documents folder in ResumeStudy1-Jamie.
- Place the participant's instructions for their given condition in the experiment room along with 2 walkie talkies on the SAME channel (207, 208, 208A or 204). If they are in PRL or PL do not forget to put a link sheet (with their SUBJECT NUMBER and DATE). Place a job description underneath the instructions and link sheet. For condition O place the MS word document resume example underneath the job description. For conditions PR, PRL, P, and PL place the Linkedin resume example underneath the job description.

2. 5 - 10 minutes before the next subject arrives place a clip board with 2 copies of the consent form on the chair in the hallway underneath the RESUME DEVELOPMENT STUDY sign.

3. When the participation arrives sign them in using the following procedure:

- On the "Department of Communication Student Participation Form" (clipboard), check in participant name, net ID, phone number, professor with whom they're receiving extra credit, class and section number.
- The subject number should already be on the sheet. Use their SUBJECT NUMBER on EVERYTHING that the person writes on (i.e. informed consent form, link sheet, script for revealing deception) along with the DATE. In the second column of the sheet, note the condition and double check to make sure that you have the correct documents in the experiment room (O, PR, PRL, P or PL).

3. Make sure that the participant signed both copies of the informed consent form. Take one for our records and give them the second copy. Leave the clipboard on the chair in the hallway.

4. Take the participation to the experiment room (207, 208, 208A or 204). Read from the following script for each condition:

- O: "We're interested in how students create resumes for specific jobs. Today we're going to ask you to create a resume for the job description under your instructions. We'd like you to create your resume the way you would if you were actually going to apply for this job in the real world. We want you to provide the best representation of yourself for the qualifications and responsibilities of this specific job. As added incentive the participant who provides the best reflection of their skills, abilities and experiences will also be chosen from a panel that we will conduct at the end of the semester and will receive a $100 gift certificate to the Cornell Store. [switch on the participant's monitor]

We would now like you to fill out the skeleton in this MS word document. I am going to give you this walkie talkie. If you have any questions or when you are finished creating your resume simply press the button on the side once or hold the button on the side down while you ask me to come help you [let them try this to make sure it is

working and that both are on the same channel]. Good luck. Let me know if you have any questions!

PR: "We're interested in how students create resumes for specific jobs. Today we're going to ask you to create a profile on the professional networking website based on a job description. Have you heard of Linkedin? [if they say no, provide them with the following overview] Linked in is a bit like facebook for people seeking jobs. It is a very helpful tool in that allows you to make connections with former employers, professors, coworkers and friends. It is very popular among both academics and professionals as a tool for both reconnecting and networking.

We'd like you to create your resume the way you would if you were actually going to apply for this job in the real world. We want you to provide the best representation of yourself for the qualifications and responsibilities of this specific job. As added incentive the participant who provides the best reflection of their skills, abilities and experiences will also be chosen from a panel that we will conduct at the end of the semester and will receive a $100 gift certificate to the Cornell Store. [switch on the participant's monitor]

We would now like you to sign up for your Linkedin account. Fill out the information on the first page. When you get to the next page you will be asked why you want to join Linkedin. Please uncheck all of the boxes except the "looking for a job" box. When you get to the main Linkedin page, please buzz me on the walkie talkie. To use it simply press the button on the side once or hold the button on the side down while you talk. [let them try this to make sure it is working and that both are on the same channel]. When I come back I will show you which sections we would like you to fill out and give you some additional instructions.

[After they buzz you, click on the 'My Profile' tab for them.] First I am going to choose some privacy settings for you. This means that only you will have access to your Linkedin profile. You can change these settings after you participate in the experiment,

but for now we are going to keep your profile private [click on “Public Profile setting” and choose “None off” option].

We would now like you to fill out the section under your name [show them where], as well as the experience, education, summary and additional info sections. [Show them where each of these sections is located]. Though the website does not prompt you to do so, please provide dates for the activities you're involved with and the honors and awards you have received (i.e. I participated from September 2006 to the present). Please buzz me on the walkie talkie when you are finished completing your profile. Good luck. Let me know if you have any questions!

PRL: "We're interested in how students create resumes for specific jobs. Today we're going to ask you to create a profile on the professional networking website based on a job description. Have you heard of Linkedin? [if they say no, provide them with the following overview] Linked in is a bit like facebook for people seeking jobs. It is a very helpful tool in that allows you to make connections with former employers, professors, coworkers and friends. It is very popular among both academics and professionals as a tool for both reconnecting and networking.

We'd like you to create your resume the way you would if you were actually going to apply for this job in the real world. We want you to provide the best representation of yourself for the qualifications and responsibilities of this specific job. As added incentive the participant who provides the best reflection of their skills, abilities and experiences will also be chosen from a panel that we will conduct at the end of the semester and will receive a $100 gift certificate to the Cornell Store. [switch on the participant's monitor]

We'd also like you to further engage in Linkedin by providing the name of up to 10 individuals with whom you'd like to create connections. It is alright if these people are not current members of linkedin, we can send out invitations to them later in the study. You don't HAVE to provide 10 names, but it is important to our study that you provide as much information as possible.

After you are finished writing down your connections, we would like you to sign up for your Linkedin account. Fill out the information on the first page. When you get to the next page you will be asked why you want to join Linkedin. Please uncheck all of the boxes except the "looking for a job" box. When you get to the main Linkedin page, please buzz me on the walkie talkie. To use it simply press the button on the side once or hold the button on the side down while you talk. [let them try this to make sure it is working and that both are on the same channel]. When I come back I will show you which sections we would like you to fill out and give you some additional instructions. [After they buzz you, click on the 'My Profile' tab for them.] First I am going to choose some privacy settings for you. This means that only you will have access to your Linkedin profile. You can change these settings after you participate in the experiment, but for now we are going to keep your profile private [click on "Public Profile setting" and choose "None off" option].

We would now like you to fill out the section under your name [show them where], as well as the experience, education, summary and additional info sections. [Show them where each of these sections is located]. Though the website does not prompt you to do so, please provide dates for the activities you're involved with (i.e. I participated from September 2006 to the present). Please buzz me on the walkie talkie when you are finished completing your profile. At that point we can begin to link you up with the connections your provide. Good luck. Let me know if you have any questions!

P: "We're interested in how students create resumes for specific jobs. Today we're going to ask you to create a profile on the professional networking website based on a job description. Have you heard of Linkedin? [if they say no, provide them with the following overview] Linked in is a bit like facebook for people seeking jobs. It is a very helpful tool in that allows you to make connections with former employers, professors, coworkers and friends. It is very popular among both academics and professionals as a tool for both reconnecting and networking.

We'd like you to create your resume the way you would if you were actually going to apply for this job in the real world. We want you to provide the best representation of yourself for the qualifications and responsibilities of this specific job. As added incentive the participant who provides the best reflection of their skills, abilities and experiences will also be chosen from a panel that we will conduct at the end of the semester and will receive a $100 gift certificate to the Cornell Store. [switch on the participant's monitor]

We would now like you to sign up for your Linkedin account. Fill out the information on the first page. When you get to the next page you will be asked why you want to join Linkedin. Please uncheck all of the boxes except the "looking for a job" box. When you get to the main Linkedin page, please buzz me on the walkie talkie. To use it simply press the button on the side once or hold the button on the side down while you talk. [let them try this to make sure it is working and that both are on the same channel]. When I come back I will show you which sections we would like you to fill out and give you some additional instructions.

[After they buzz you, click on the 'My Profile' tab for them.] First I am going to choose some privacy settings for you. This means that your Linkedin profile will be publicly accessible. This means that if an employer were to do an internet search for your name they would be able to view the information in your profile. [click on "Public Profile setting" and choose "Full view - recommended" option].

We would now like you to fill out the section under your name [show them where], as well as the experience, education, summary and additional info sections. [Show them where each of these sections is located]. Though the website does not prompt you to do so, please provide dates for the activities you're involved with and the honors and awards you have received (i.e. I participated from September 2006 to the present). Please buzz me on the walkie talkie when you are finished completing your profile. Good luck. Let me know if you have any questions!

PL: "We're interested in how students create resumes for specific jobs. Today we're going to ask you to create a profile on the professional networking website based on a job description. Have you heard of Linkedin? [if they say no, provide them with the following overview] Linked in is a bit like facebook for people seeking jobs. It is a very helpful tool in that allows you to make connections with former employers, professors, coworkers and friends. It is very popular among both academics and professionals as a tool for both reconnecting and networking.

We'd like you to create your resume the way you would if you were actually going to apply for this job in the real world. We want you to provide the best representation of yourself for the qualifications and responsibilities of this specific job. As added incentive the participant who provides the best reflection of their skills, abilities and experiences will also be chosen from a panel that we will conduct at the end of the semester and will receive a $100 gift certificate to the Cornell Store. [switch on the participant's monitor]

We'd also like you to further engage in Linkedin by providing the name of up to 10 individuals with whom you'd like to create connections. It is alright if these people are not current members of linkedin, we can send out invitations to them later in the study. You don't HAVE to provide 10 names, but it is important to our study that you provide as much information as possible. Please provide these names first.

After you are finished writing down your connections, we would like you to sign up for your Linkedin account. Fill out the information on the first page. When you get to the next page you will be asked why you want to join Linkedin. Please uncheck all of the boxes except the "looking for a job" box. When you get to the main Linkedin page, please buzz me on the walkie talkie. To use it simply press the button on the side once or hold the button on the side down while you talk. [let them try this to make sure it is working and that both are on the same channel]. When I come back I will show you which sections we would like you to fill out and give you some additional instructions.

[After they buzz you, click on the 'My Profile' tab for them.] First I am going to choose some privacy settings for you. This means that your Linkedin profile will be publicly accessible. This means that if an employer were to do an internet search for your name they would be able to view the information in your profile. [click on "Public Profile setting" and choose "Full view - recommended" option].

We would now like you to fill out the section under your name [show them where], as well as the experience, education, summary and additional info sections. [Show them where each of these sections is located]. Though the website does not prompt you to do so, please provide dates for the activities you're involved with and the honors and awards you have received (i.e. I participated from September 2006 to the present). Please feel free to use the example Linkedin profile we provide as a guide for structuring your resume [show them]. Please buzz me on the walkie talkie when you are finished completing your profile. At that point we can begin to link you up with the connections your provide. Good luck. Let me know if you have any questions!

FREQUENTLY ASKED STUDENT QUESTIONS (NOTE: REFER TO THIS WHENEVER YOU ARE NOT SURE WHAT TO TELL STUDENTS, DO NOT JUST MAKE SOMETHING UP BECAUSE IT CAN AFFECT THE WAY STUDENTS RESPOND)

1. SHOULD I JUST MAKE STUFF UP? (OR DOES THIS HAVE TO BE MY REAL INFORMATION?)

No, we want you to treat this activity as you would if you found this job searching online at home and were creating a specific resume to obtain this job. Treat this exactly as you would a real job search. This means tailoring the way you present your skills, abilities and experiences to best fit this job.

2. WHAT IF I DON'T WANT TO BOTHER PEOPLE BY SENDING THEM LINKS?

You don't have to provide names of people to link with, but it is important to our study that you attempt to provide as many names as you can. If these individuals are not current members of Linkedin, which they likely are due to it's popularity among professionals and academics, an e-mail will simply be sent to them as it would a friend request on Facebook. Again we are not requiring you to do this, but would like you to try to provide as many names as possible because it is important to our study.

3. WHAT IF I DON'T KNOW ANYONE WITH A LINKEDIN PROFILE?

That is alright, we can send invitations to the people whose names you provided. The website is completely legitimate with many professors and graduate students from Cornell as members. The people whose names you provide will simply receive an e-mail similar to a friend request on Facebook. If the choose not to join Linkedin all they need to do is delete the e-mail.

4. SO, CAN I DELETE THIS WHEN I GO HOME?

Sure you can delete your profile. We would really rather you not do this because it is important to our study and our research. Again, you are more than welcome to delete or alter your profile, but we would prefer that you keep it as is for the duration of the study if you are able to.

FROM HERE ON, THE PROCEDURE IS THE SAME FOR ALL CONDITIONS. DO NOT MENTION THE NATURE OF THE OTHER CONDITIONS TO PARTICIPANTS BEFORE YOU DEBRIEF THEM.

5. When the participant notifies you that they have completed their profile by buzzing you on the intercom, come in and save their information.

1. For the Offline condition: Simply hit “Save”. Minimize, but do not close the window.

2. For the Linkedin conditions: Go to file in the web browser and then “Save page as”. Save the page with the following file name “Resume001” (the number should be the subject number you assigned the participant). Save in Documents folder in ResumeStudy1-Jamie. Minimize, but not closing, their Linkedin profile. Open a new

window (not tab) in the web browser and paste surveymonkey link (provided below) into a separate window of the web browser. It should be saved either on the Desktop--> ResumeStudy1-Jamie as "Jamiesurveymonkeylink" or in Documents --> ResumeStudy1-Jamie --> "Jamiesurveymonkeylink"

http://www.surveymonkey.com/s.aspx?sm=S1qWh32pFTJnf9pBYhjnkA_3d_3d

After doing this, enter the SUBJECT NUMBER on the first page of the questionnaire.

Recite the following script:

"Now we're going to have you complete some questionnaire items on Surveymonkey. There are 4 pages of questionnaire items after the instructions page. The first, second and fourth are very short while the third is a bit longer. Please respond based on your experience with this activity and your personal qualities. Let me know if you have questions. You can just buzz me on the walkie talkie when you are finished."

6. When the participant completes the questionnaire, provide them with the script for revealing deception. Recite the following script:

"We're now at the third and final phase of the study. Something that you may have guessed while reading the preliminary instructions and filling out your profile is that we're also interested in deception on resumes. We aren't making any judgments about whether deception is good or bad, we're just interested in how it occurs on resumes. Something that particularly sparked our interest in deception was a recent study that asked participants to fill out scholarship applications. The applications had minimum requirements, but there was no incentive to be deceptive. Even so, 90 percent of the students who participated in the study lied on their application.

We realize that our study pushed participants to be deceptive by offering the reward of a $100 gift certificate for the best fitting resume. What we'd like you to do now is go back through your profile and indicate any area where you may have created false belief. False belief in this case would be any type of exaggerations or embellishment of your activity that would provide a prospective employer with an inaccurate image of your

skills, abilities and experiences. One example would be saying that your proficient in Dreamweaver when really you've only used it a few times. Another would be saying that you worked at a company for 3 months during the summer when you were really only there for a month. Just simply go back through your profile and record the deceptive information exactly as it appears in the profile in the first column [point]. In center column [point] provide a more truthful version of the deception [refer to examples]. In the third column please write the section of the profile [point].

We will not share your information with anyone and we aren't making any judgments about you. You name will never be directly connected to this profile in anyway. It is very important that you feel comfortable providing as much information as possible and revealing any type of false belief that you have created in your resume. Our study really depends on your reports! Again the information you provide will be COMPLETELY confidential and will not be connected with your name directly only with a subject number."

Open their saved Linkedin profile so that they may review it while revealing deception.

7. Once the student has finished the form and notifies you via the buzzer, provide them with a debriefing form. Give them time to read the form and ask them if they have any additional questions! Read the following script:

"Thank you so much for your participation in the study. As I mentioned earlier we are interested in deception in resumes. We want to know if there are differences between deception as it occurs online versus offline. [FOR LINKED IN CONDITIONS ONLY] We will not actually be linking you up to any of the connections you provided and their names will only used as a count. Please feel free to delete or alter your Linkedin profile when you go home. It will not effect the results of the study.

I know that in the beginning of the study we told you that the best-fitting resume would will a $100 gift card. The winner of the $100 CornellCard will actually be selected via

random drawing at the completion of the study and notified via e-mail so that they can pick it up.

PLEASE do not discuss the nature of this study with any of your friends. If they realize that the study explores deception or online resumes, it may alter the way that they respond to the activity. This is very important to the study and to my thesis :). Thank you so much for coming in. Do you have any questions for me?"

APPENDIX B

Job Description

International Marketing Consultant

Responsibilities

- Oversee all marketing activities for appointed departments, including managing advertising in the organization's catalogues, consumer and trade publications, and promotional projects such as brochures, client letters, internal and external promotional materials, in-house sale enhancements and sale view signage
- Work very closely with advertising agency (exchange information and expertise) to pinpoint best vehicles for advertising to maximize resources
- Work with Design department to complete projects efficiently and on time
- Develop relationship and work closely with domestic (New York, Chicago, San Francisco) and international marketing counterparts (London, Paris, Tokyo, Sydney) to promote organization's interests globally
- Maintain a thorough ongoing knowledge of the department(s) business goals, clientele, and competitive environment
- Brainstorm and contribute to proposals, exhibition design and competitive tracking
- Assist with corporate marketing initiatives, as needed

Qualifications

- Project management experience
- Strong marketing and media experience
- Highly organized with attention to detail
- Strategic thinking skills and ability to offer creative solutions
- Positive working rapport with colleagues
- A team player who also works well independently
- Excellent interpersonal and communication skills

- Strong writing skills and meticulous attention to detail
- Ability to work under multiple deadlines
- Strong working knowledge of Microsoft Word, Outlook, Excel and Access
- Strong working knowledge of Adobe Photoshop, Illustrator, InDesign and Dreamweaver
- Proficiency in a second language (preferably French or Japanese)

Location

We have openings in the following domestic and international offices and are more than willing to place applicants at the office of their choice: New York, San Francisco, Chicago, London, Paris, Tokyo and Sydney. Applicants should also note that placement at a particular office is never permanent and our procedures for transfer are very flexible.

Starting Salary

Consultants typically start at $95,000, with an additional first-year signing bonus of $5,000 – 7,500. Salaries are negotiable based on cost of living in specific office locations and specific applicant needs.

APPENDIX C

Worksheet for Revealing Deception

Subject: Date:

You have now reached the third and final phase of the experiment. An additional purpose of this study was to learn more about deception on resumes. Past research shows us that most people lie at least once or twice a day and often much more frequently than this. What's more, one study found that 90 percent of people lied on scholarship applications.

In the next part of the study, we would like you to identify all of the deceptions on your resume. Deception in your resume refers to any information that you provided that you know to be false and that would give the employer a false sense about your experiences, skills or abilities.

It is important that you know that we make no judgments about whether deception is good or bad. In fact, our promise of providing a cash prize to the best-fitting resume was designed to increase the chance that participants lied on their resumes. We are interested in the deceptive behavior patterns that people engage in when forming resumes – so it is extremely important that you feel comfortable identifying all your lies, big or small, on your resume (our study depends on it!). We will not share the information you provide or judge you-*everyone* lies.

Please go through your resume and indicate, with bullet points, each deception that you provided on your resume in the left-hand column. In the center column please, provide a more truthful version of the deception. In the right-hand column, please indicate the where the deception is located in your profile. Below we've provided some examples for you.

Deception	Truthful Version of the Deception	Profile Section

APPENDIX D

Practice of Deception in Resumes Debriefing

As the use of Computer-Mediated Communication (CMC) becomes more ubiquitous in organizational settings, it becomes increasingly important for us to understand how a variety of communication processes (i.e. Human Resources practices such as hiring) are affected by the practice and detection of deception. For example, what are the characteristics of truthful and deceptive messages in online resumes?

Rationale

In this experiment, we compared differences between professional networking profiles with and without privacy settings and with and with out network connections. We wanted to know how these differing contexts affected the practice of deception.

Results

So, what do you think? Do you think that people lie more in traditional resumes or resumes placed online? What factors would cause you to be more or less deceptive on your resume? If you would like to know how the results turned out, just email us and we'll send you a report when we have collected and analyzed all the data.

Rewards

At the beginning of this study, we told you that the participant who provides the best representation of their experience, skills and abilities in terms of the job's qualifications and responsibilities would receive a $100 gift certificate to the Cornell Store. We do not plan to determine the best fitting resume, but will instead enter all participants into a drawing for the prize. The winner will be notified via e-mail and may pick up their prize from Jamie Guillory.

CONFIDENTIAL

Do not discuss the manipulations or results of this experiment with others in your classes

If you have any other questions, please feel free to contact Jamie Guillory or Professor Hancock at jeg258@cornell.edu or jth34@cornell.edu, or by phone (215.872.0088) or (607.255.4522).

Thank you for your participation.

APPENDIX E

Coding Lies from the Interpersonal Lie Taxonomy

When you go to code each lie use this decision tree to code by asking yourself the following questions and acting based on the tree's recommendation. THERE ARE EXAMPLES FOR EACH AND ALSO ** ITEMS TO INDICATE AREAS THAT MAY CAUSE DIFFICULTY SO USE THIS WHEN THERE'S CONFUSION.

ALSO WHEN YOU'RE STUCK ON A PARTICULAR LIE, THINK ABOUT THE INTENTION THAT THEY HAD BY READING THE MORE TRUTHFUL VERSION OF THE DECEPTION. DID THEY INTEND TO EXAGGERATE, OR LEAVE OUT INFORMATION OR CONVEY INFORMATION THAT WAS ENTIRELY UNTRUE?

PAY ATTENTION TO THE VERBS THAT STUDENTS USE FOR CLUES ABOUT WHAT TYPE OF LIE IT IS.

WHEN YOU THINK THAT THE LIE COULD BE MORE THAN ONE OF THE FOUR OPTIONS, ALWAYS FAVOR THE LOWER NUMBER (i.e., if you're deciding between 1 (Outright) and 2 (Exaggeration) code it as 1)

NOTE***: If the information that the person provides is a careless mistake, typo, or any type of accidental error. Also if you don't think it is actually a lie CODE AS Other using a 4.

1. Did the person do what they said they did or can they do what they say they can do?
If NO code as Outright lie using a 1. Go to the next lie.
Examples: Deception: Maintained strong ties with external organization, More Truthful Version: Had an underling do it.

- Deception: Business idea competition: 100+ entries, More truthful: 50+ entries
- Deception: Supervisor at Ripen Public School Pool, More truthful: Actual title was attendant

If YES go to the next question.

- Deception: Led opening and closing procedures, More truthful: Assisted, not led opening and closing procedures

2. Is what the person did a question of magnitude (i.e., did the person do more or less of what they say they did, or did they imply that what they did was more or less significant than it was?)? (NOTE: If you're not sure say NO and continue in the coding tree)

If NO go to question 4.

If YES go to question 3.

If NOT SURE, see question 3 and ***starred**** items below.

3. Does it involve dates of employment and is it in the ADDITIONAL INFORMATION OR EXPERIENCE SECTIONS?

If YES code as Outright using a 1. Go to next lie.

If NO code as Exaggeration using a 2. Go to next lie.

If NOT SURE, see examples and ***starred*** items below.

Examples: Deception: Cornell Film Club: attending regular club meetings, More truthful version: attend occasional meetings.

Deception: Marketer and Server for Lemongrass Kitchen, More truthful: More of a server than a marketer, though did take on some marketing tasks.

***Dates of employment must be specific in that they provide a time frame for employment (i.e., June 2007 – August 2007).

Deception: Spent several weeks travelling with a salesmen, More truthful: Spent 1 week

Deception: Random Acts of Kindness (9/05 - 5/06), More truthful: 12/05 - 5/06

*** If dates are not provided in the ADDITIONAL INFORMATION OR EXPERIENCE sections and student says they are no longer involved Code as Outright with a 1.

***If the person records an activity or position in the Education section OR , which does NOT prompt dates of employment, but then explains in their "More truthful version" that they only did this for a certain amount of time or just started doing this, code as Subtle using a 3

Example: Deception: President B-Aware, More Truthful Version: President only one semester.

Deception: Cornell university: Dean's list 2007, More truthful: Dean's list Fall 2007.

Deception: Cornell Synchronized skating (official national competitor), More truthful: Only been to nationals once

** If the person states that they worked in a particular season, but only really worked for certain months from that season or if they say that they worked somewhere for 2 years, but they only worked during breaks and summers, also code as Exaggeration using a 2.

Examples: Deception: Employed at Gap Summer 06, More Truthful Version: Employed second part of June, all July, first part August.

Deception: Worked at DeeDee Kramer and Associates, Inc. 9/2002-6/2006, More truthful: Very rare and sporadic office work during these dates.

BUT: If the person continued to work, but just did so in a different location, or in a different setting, code as Subtle using a 3.

Example: Deception: Business strategy summer intern at Tsumnia and Co. 6/07-8/07, More truthful: Only stayed in Tokyo 6/07, 7/07-8/07 wrote business report from school so still worked at this time but not on-site.

**If a person is not yet a member of an organization, but they are soon to be involved or inducted into the organization code this as Exaggeration using a 2.

Example: Deception: Seal and Serpent Society, More truthful: Seal and Serpent Society Pledge (will be brother after Spring Break).

4. Does the lie evade or omit relevant or important details?

**NOTE: If what the person records is not a lie, but implies that their experience was more valuable or effective than it actually was code this as Subtle using a 3.

Example: Deception: Designed animated banners, More truthful: They were never actually used.

Deception: Assisted the manager of branch in developing New York offices, More truthful: assisted by making contact lists and helped out with other odds and ends.

**Also if what the person records is in an ill-fitting section of the profile, code as Subtle using a 3.

Example: Deception: National scholars honor society listed as an activity, More truthful: should ONLY be under honors because no club exists at Cornell.

Human Computer Interaction group It is not technically a job or paid, it's student research.

**BUT, if what the person records is not a lie and doesn't imply anything untruthful, and you can tell that their intention was not to convey anything untruthful, code as Other using a 4.

Example: Deception: Compiled press kits, More truthful: Compiled press kits, but didn't write the materials in the press kits.

If NO code as Other using a 4. Go to next lie.

If YES code as Subtle using a 3. Go to next lie.

Examples: Deception: Recognized as employee out of 60 with most surveys completed per hour for a project, More truthful: There were 60 employees, but only 40 worked on this project.

APPENDIX F

Coding Resume Related Lies

When thinking of these types of deception, consider the person's intention in writing this information. Even if you don't necessarily think what they recorded was a lie, what do you think their intention was in writing this on their resume? If you think their intention was to falsely represent themselves in a certain way, this is important in coding the deception and you should attempt to avoid coding the item as "5" for Other as best you can.

Please follow the decision tree below in coding the deception in the data set. Use the provided examples when you are unsure of how to code a specific item.

1. Is the utterance related to responsibility?

Lies related to responsibility are those that in some way discuss a person's responsibilities at a job or with a volunteer organization, activity, etc. Ask yourself:

DOES THE DECEPTION

A) CHANGE THE NATURE OF THE RESPONSIBILITY, OR B) SIMPLY RELATE TO A GREATER OR LESSER AMOUNT OF A SPECIFIC RESPONSIBILITY?

If you answer A) code the deception as 1 indicating deception related to responsibility.

If you answer B) go to question 4.

If the deception is unrelated to responsibility go to question 2.

For example: Lies that relate to how involved or how much experience someone had with specific responsibilities should be coded as 4. Amount of Experience or Level of Involvement, BUT if the person says in their Deception that they were in a higher position of power than they do in their Truthful Version, Code as 2 for responsibility.

Examples:

• Deception: Maintained strong ties with external org.

Truth: Had an underling do it.

• Deception: Treasurer of Red Key

Truth: This job requires minimal, if any work.

• Deception: Interacted with customers frequently

Truth: There was little or no interaction and the job was very menial, based on order

• Deception: Organize museum spring benefit

Truth: Helped staff who organized. Sent e-mails and mailed promotions.

• Deception: Produced idea and developed marketing plan for skare for life fundraiser for 300 clients, generating $3K

Truth: Produced idea, but received help developing marketing plan

• Deception: 9 students work for my company

Truth: 6 students work for my company

2. Abilities or Skills

Lies related to abilities or skills are those that indicate the ability to use software, language, or anything that involves some level of expertise. These lies may include awards or honors given that provide recognition for some level of ability. Ask yourself: IS THE LIE RELATED TO SOME ABILITY, SKILL OR ACHIEVEMENT?

If yes, code as 2 indicating deception related to abilities or skills.

If the deception is unrelated to abilities, skills or achievement go to question 3.

Examples:

• Deception: Familiarity w/ Adobe Suite.

Truth: Not with Illustrator

• Deception: Proficient in Japanese

Truth: Beginner

• Deception: Member of Cornell design league

Truth: no application/selection; Involved, go to meeting once a week.

• Deception: Post-standard "Voices Award" winner

Truth: Contributing writer

• Deception: Recognized as employee out of 60 with most surveys completed per hour for a project.

Truth: There were 60 employees, but only 40 worked on this project.

3. Amount of Experience or Level of Involvement

Lies related to amount of experience or involvement are those that indicate a greater or lesser degree of participation in some specific activity, job, etc.

Does the deception simply indicate that the person was more or less heavily involved with a specific task (i.e., did they work at an organization for less time than originally indicated, did they imply that they were more active in a club or organization, etc.)?

If yes, code as 3 for deception related to amount of experience or level of involvement.

BUT If the deception changes the nature of the responsibility or task that the person is engaged in, the lie should be coded as 1 for deception related to responsibility.

Examples:

• Deception: Chair, Performance Committee

Truth: Event has yet to occur, but otherwise accurate.

• Deception: Intern at Long Islander Newspaper from 8/06-6/07

Truth: Intern from 10/06-5/07

• Deception: Captain of tennis team, 2 years

Truth: Was on tennis team, captain only 1 year

• Deception: National society of collegiate scholars 8/2007 - present

Truth: Member, but only attended 1 meeting

4. Interests or Motivations

Lies related to interests or motivations relate to any deception that indicates interest, motivation or concentration that is in some way false. This may be false in terms of the amount of interest or motivation, or in terms of a lack of motivation or interest all together. Lies related to interests or motivation often indicate some level of preference for or against a specific attribute.

Ask yourself: Does the deception express some interest, motivation or concentration that does not align with the individual's actual interests, motivations or concentrations?

If yes, code as 4 indicating deception related to interest or motivation.

If no, go to question 5.

Examples:

• Deception: Major concentration in media studies

Truth: not exactly sure what my major concentration is

• Deception: Marketing is my best fit.

Truth: I'm not interested in marketing at all, just in the high salary.

• Deception: Studied French in hopes of living in France to pursue international marketing consulting.

Truth: I like living in the US and want to be a doctor.

5. Other

The items in this category are often mistakes. Sometimes these items are not lies at all. Also any item that doesn't fit into the other categories should be coded as Other. Before coding an item as 5 indicating other, ask yourself: Does this deception logically fit in any of the above four categories? If not, code as 5 indicating other.

Examples:

• Deception: 1000-5000 employees (Dr. Jay's Inc.)

Truth: About 500 employees

• Deception: Assisted with planning an execution of spring exhibition opening.

Truth: Exhibition was a mandatory event that all interns need to attend to check people in and hand out flyers and t-shirts.

• Deception: Mention of Dr. William Baffa

Truth: I don't know if William is his first name

• Deception: VA Environmental Awareness Group

Truth: It was just a local group of friends volunteering

• Deception: National scholars' honor society listed as an activity

Truth: should ONLY be under honors because no club exists at Cornell

• Deception: "and online social interaction" (the project is just getting started)

Truth: "and beginning further work on online social interaction"

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